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IN THE CLAIMS:

1-105. Cancelled

106. (Currently amended) A delivery vehicle for use in targeted delivery of an active agent, the delivery vehicle comprising:

- (i) a targeting agent and a pharmaceutically acceptable diluent or excipient, wherein the targeting agent that preferentially binds a radiation inducible target selected from the group consisting of ICAM-1, P-selectin, β_3 Integrin, an activated platelet, and combinations thereof in a target tissue;
- (ii) a pharmaceutically acceptable diluent or excipient; and
- (iii) an active agent comprising a toxin, a radiosensitizing agent, or combinations thereof.

107. Cancelled

108. (Original) The delivery vehicle of claim 106, wherein the targeting agent is selected from the group consisting of a protein; a peptide; an antibody; a genetic construct; and combinations thereof.

109. (Currently amended) ~~A The delivery vehicle of claim 106, for use in targeted delivery of an active agent, the delivery vehicle comprising a targeting agent and a pharmaceutically acceptable diluent or excipient, wherein the targeting agent preferentially binds a radiation inducible target in a target tissue and comprises fibrinogen or a peptide fragment or analog thereof.~~

110. (Original) The delivery vehicle of claim 109, wherein the peptide fragment of fibrinogen is a gamma subunit peptide fragment of fibrinogen.

111. (Original) The delivery vehicle of claim 110, wherein the gamma subunit peptide fragment of fibrinogen comprises any of SEQ ID NOs:1-10, or comprises an analog or fragment of any of SEQ ID NOs:1-10.

112. (Currently amended) The delivery vehicle of claim 111, A delivery vehicle for use in targeted delivery of an active agent, the delivery vehicle comprising a targeting agent and a pharmaceutically acceptable diluent or excipient, wherein the

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targeting agent comprises a gamma subunit peptide fragment of fibrinogen and preferentially binds a radiation inducible target in a target tissue, wherein the gamma subunit peptide fragment of fibrinogen comprises HHLGGAKQAGDV (SEQ ID NO:1).

113. Cancelled

114. (Currently amended) The delivery vehicle of claim ~~113~~ 106, wherein the ~~active agent~~ delivery vehicle further comprises an imaging agent.

115. (Currently amended) The delivery vehicle of claim 114, wherein the imaging agent is selected from the group consisting of a paramagnetic imaging agent, a radioactive imaging agent, and a fluorogenic ion imaging agent.

116. (Original) The delivery vehicle of claim 115, wherein the radioactive imaging agent is selected from the group consisting of gamma-emitters, positron-emitters and x-ray-emitters.

117. (Original) The delivery vehicle of claim 114, wherein the radioactive imaging agent is selected from the group consisting of ⁴³K, ⁵²Fe, ⁵⁷Co, ⁶⁷Cu, ⁶⁷Ga, ⁶⁸Ga, ⁷⁷Br, ⁸¹Rb, ^{81m}Kr, ^{87m}Sr, ^{99m}Tc, ¹¹¹In, ¹¹³In, ¹²³I, ¹²⁵I, ¹²⁷I, ¹²⁹Cs, ¹³¹I, ¹³²I, ¹⁹⁷Hg, ²⁰³Pb and ²⁰⁶Bi.

118. (Previously presented) The delivery vehicle of claim 114, wherein the radioactive imaging agent is present in the delivery vehicle in an amount ranging from about 0.1 to about 100 millicuries.

119. (Previously presented) The delivery vehicle of claim 118, wherein the radioactive imaging agent is present in the delivery vehicle in an amount ranging from about 1 to about 10 millicuries.

120. (Previously presented) The delivery vehicle of claim 119, wherein the radioactive imaging agent is present in the delivery vehicle in an amount ranging from about 2 to about 5 millicuries.

121. (Previously presented) The delivery vehicle of claim 120, wherein the radioactive imaging agent is present in the delivery vehicle in an amount ranging from about 1 to about 5 millicuries.

122. Cancelled

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123. (Currently amended) The delivery vehicle of claim ~~422~~ 106, wherein the delivery vehicle further comprises a therapeutic agent is selected from the group consisting of a chemotherapeutic agent, a ~~toxin~~, a radiotherapeutic agent, a ~~radiosensitizing agent~~ and combinations thereof.

124. (Original) The delivery vehicle of claim 123, wherein the chemotherapeutic agent is selected from the group consisting of an anti-tumor drug, a cytokine, an anti-metabolite, an alkylating agent, a hormone, methotrexate, doxorubicin, daunorubicin, cytosine arabinoside, etoposide, 5-4 fluorouracil, melphalan, chlorambucil, a nitrogen mustard, cyclophosphamide, *cis*-platinum, vindesine, vinca alkaloids, mitomycin, bleomycin, purothionin, macromomycin, 1,4-benzoquinone derivatives, trenimon, steroids, aminopterin, anthracyclines, demecolcine, etoposide, mithramycin, doxorubicin, daunomycin, vinblastine, neocarzinostatin, macromycin, α -amanitin, and combinations thereof.

125. (Currently amended) The delivery vehicle of claim ~~425~~ 106, wherein the toxin is selected from the group consisting of Russell's Viper Venom, activated Factor IX, activated Factor X, thrombin, phospholipase C, cobra venom factor, ricin, ricin A chain, *Pseudomonas* exotoxin, diphtheria toxin, bovine pancreatic ribonuclease, pokeweed antiviral protein, abrin, abrin A chain, gelonin, saporin, modeccin, viscumin, volkensin and combinations thereof.

126. (Currently amended) The delivery vehicle of claim 123, wherein the radiotherapeutic agent is selected from the group consisting of ⁴⁷Sc, ⁶⁷Cu, ⁹⁰Y, ¹⁰⁹Pd, ¹²³I, ¹²⁵I, ¹³¹I, ¹⁸⁶Re, ¹⁸⁸Re, ¹⁹⁹Au, ²¹¹At, ²¹²Pb, ²¹²Bi, ³²P, ³³P, ⁷¹Ge, ⁷⁷As, ¹⁰³Pb, ¹⁰⁵Rh, ¹¹¹Ag, ¹¹⁹Sb, ¹²¹Sn, ¹³¹Cs, ¹⁴³Pr, ¹⁶¹Tb, ¹⁷⁷Lu, ¹⁹¹Os, ^{193M}Pt, and ¹⁹⁷Hg.

127. (Currently amended) The delivery vehicle of claim ~~423~~ 106, wherein the radiosensitizing agent is selected from the group consisting of an anti-angiogenic agent; a DNA protein kinase inhibitor; a tyrosine kinase inhibitor; a DNA repair enzyme inhibitor; nitroimidazole; metronidazole; misonidazole; a genetic construct comprising an enhancer-promoter region which is responsive to radiation, and at

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least one structural gene whose expression is controlled by the enhancer-promoter; boron-neutron capture reagents; and combinations thereof.

128. (Currently amended) The delivery vehicle of claim 127, wherein the genetic construct further comprises a viral vector.

129. (Original) The delivery vehicle of claim 123, wherein the therapeutic agent is a chemotherapeutic agent, and the delivery vehicle comprising the chemotherapeutic agent is administered in an amount ranging from about 10 to about 1000 mg.

130. (Original) The delivery vehicle of claim 129, wherein the delivery vehicle comprising the chemotherapeutic agent is administered in an amount ranging from about 50 to about 500 mg.

131. (Original) The delivery vehicle of claim 130, wherein the delivery vehicle comprising the chemotherapeutic agent is administered in an amount ranging from about 100 to about 250 mg.

132. (Currently amended) The delivery vehicle of claim ~~423~~ 106, wherein the therapeutic active agent is a toxin, and the delivery vehicle comprising the toxin is administered in an amount ranging from about 1 to about 500 µg.

133. (Original) The delivery vehicle of claim 132, wherein the delivery vehicle comprising the toxin is administered in an amount ranging from about 10 to about 100 µg.

134. (Original) The delivery vehicle of claim 133, wherein the delivery vehicle comprising the toxin is administered in an amount ranging from about 20 to 50 µg.

135. (Currently amended) The delivery vehicle of claim ~~434~~ 123, wherein the therapeutic agent is a radiotherapeutic agent, and the delivery vehicle comprising the radiotherapeutic agent is administered in an amount ranging from about 0.5 to about 100 mg.

136. (Original) The delivery vehicle of claim 135, wherein the delivery vehicle comprising the radiotherapeutic agent is administered in an amount ranging from about 1 to about 50 mg.

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137. (Original) The delivery vehicle of claim 136, wherein the delivery vehicle comprising the radiotherapeutic agent is administered in an amount ranging from about 5 to about 10 mg.

138. Cancelled

139. (Currently amended) The delivery vehicle of claim 138 106, further comprising a carrier.

140. (Currently amended) The delivery vehicle of claim 139, wherein the carrier and the targeting agent are the same.

141. (Original) The delivery vehicle of claim 139, wherein the carrier is selected from the group consisting of a platelet; a leukocyte; a protein; a peptide; an antibody; a microsphere; a liposome; a genetic construct; and combinations thereof.

142. (Currently amended) A The delivery vehicle of claim 141, for use in targeted delivery of an active agent, the delivery vehicle comprising: wherein the carrier comprises

(a) a liposome carrier;

~~(b) a targeting agent that preferentially binds a radiation inducible target;~~
and

~~(c) a pharmaceutically acceptable diluent or excipient.~~

143. (Currently amended) The delivery vehicle of claim 142, wherein the liposome ~~carrier further~~ comprises a lipid selected from the group consisting of phosphatidylcholines (lecithins) (PC), phosphatidylethanolamines (PE), lysolecithins, lysophosphatidylethanolamines, phosphatidylserines (PS), phosphatidylglycerols (PG), phosphatidylinositol (PI), sphingomyelins, cardiolipin, phosphatidic acids (PA), fatty acids, gangliosides, glucolipids, glycolipids, mono-, di or triglycerides, ceramides, cerebrosides and combinations thereof.

144. (Currently amended) The delivery vehicle of claim 143, wherein the liposome ~~carrier further~~ comprises a cationic lipid selected from the group consisting of 1,2-dioleoyloxy-3-(trimethylamino) propane (DOTAP); N-[1-(2,3,-ditetradecyloxy)propyl]-N,N-dimethyl-N-hydroxyethylammonium bromide (DMRIE); N-

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[1-(2,3,-dioleyloxy)propyl]-N,N-dimethyl-N-hydroxy ethylammonium bromide (DORIE); N-[1-(2,3-dioleyloxy) propyl]-N,N,N-trimethylammonium chloride (DOTMA); 3 β [N-(N',N'-dimethylaminoethane)carbonyl] cholesterol (DC-Chol); and dimethyldioctadecylammonium (DDAB); dioleoylphosphatidyl ethanolamine (DOPE), cholesterol-containing DOPC, and combinations thereof.

145. (Currently amended) The delivery vehicle of claim 142, wherein the liposome further comprises a hydrophilic polymer coating and the hydrophilic polymer is selected from the group consisting of polyvinylpyrrolidone, polyvinylmethylether, polymethyloxazoline, polyethyloxazoline, polyhydroxypropyloxazoline, polyhydroxypropylmethacrylamide, polymethacrylamide, polydimethylacrylamide, polyhydroxypropylmethacrylate, polyhydroxyethylacrylate, hydroxymethylcellulose, hydroxyethylcellulose, polyethyleneglycol, polyaspartamide and combinations thereof.

146. (Original) The delivery vehicle of claim 142, wherein the targeting agent preferentially binds an activated platelet.

147. (Original) The delivery vehicle of claim 142, wherein the targeting agent is selected from the group consisting of a protein; a peptide; an antibody; a genetic construct; and combinations thereof.

148. (Currently amended) A The delivery vehicle of claim 142, for use in targeted delivery of an active agent, the delivery vehicle comprising:

- ~~(a) a liposome carrier;~~
- ~~(b) a targeting agent that preferentially binds a radiation inducible target, wherein the targeting agent is fibrinogen or a peptide fragment or analog thereof; and~~
- ~~(c) a pharmaceutically acceptable diluent or excipient.~~

149. (Original) The delivery vehicle of claim 148, wherein the peptide fragment of fibrinogen is a gamma subunit peptide fragment of fibrinogen.

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150. (Original) The delivery vehicle of claim 149, wherein the gamma subunit peptide fragment of fibrinogen comprises any of SEQ ID NOs:1-10, or comprises an analog or fragment of any of SEQ ID NOs:1-10.

151. (Currently amended) ~~The delivery vehicle of claim 150~~ A delivery vehicle for use in targeted delivery of an active agent, the delivery vehicle comprising a targeting agent and a pharmaceutically acceptable diluent or excipient, wherein the targeting agent preferentially binds a radiation inducible target selected from the group consisting of ICAM-1, P-selectin, β_3 integrin, and combinations thereof, wherein the targeting agent is a gamma subunit peptide fragment of fibrinogen that comprises HHLGGAKQAGDV (SEQ ID NO:1).

152. Cancelled

153. Cancelled

154. (Previously presented) The delivery vehicle of claim 106, wherein the radiation inducible target is a cell adhesion molecule.

155. (Currently amended) The delivery vehicle of claim ~~138~~ 108, wherein the targeting agent is ~~selected from the group consisting of a protein; a peptide; an antibody or derivative thereof; a genetic construct; and combinations thereof.~~

156. (Currently amended) The delivery vehicle of claim 155, ~~wherein the targeting agent is an antibody or a derivative thereof,~~ wherein the antibody or derivative thereof preferentially binds a radiation inducible target selected from the group consisting of ICAM-1, ~~E-selectin~~, P-selectin, β_3 integrin, and combinations thereof.

157. (Currently amended) ~~The~~ A ~~delivery vehicle of claim 156,~~ for use in targeted delivery of an active agent, the delivery vehicle comprising:

- (a) a liposome carrier;
- (b) a targeting agent that preferentially binds a radiation inducible target;
and
- (c) a pharmaceutically acceptable diluent or excipient,

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wherein the targeting agent is an antibody or derivative thereof wherein the antibody derivative is selected from the group consisting of an intact immunoglobulin molecule, a single chain immunoglobulin molecule, an Fab fragment, an Fab' fragment, an F(ab')₂ fragment, an F(v) fragment, a single-chain Fv antibody (scFv), a humanized antibody, and a monoclonal antibody.

158-172. Cancelled

173. (Currently amended) The A delivery vehicle of claim 172, for use in targeted delivery of an active agent, the delivery vehicle comprising a targeting agent and a pharmaceutically acceptable diluent or excipient, wherein the targeting agent preferentially binds a radiation inducible target selected from the group consisting of ICAM-1, P-selectin, β_3 integrin, and combinations thereof wherein the active agent comprises a genetic construct further comprises comprising a viral vector, an enhancer promoter region which is responsive to radiation, and at least one structural gene whose expression is controlled by the enhancer promoter.

174-184 Cancelled